

Project Factsheet for: Illinois Waterway Maintenance Dredging Operations & Maintenance

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Project Location Information

Location:Entire Illinois Waterway

River Basin(s): Illinois

State(s): IL

Congressional District(s): IL-11, IL-13, IL-14, IL-15, IL-16, IL-17, IL-18, IL-19, IL-2, IL-3

Status

Project in operation.

Description

In order to maintain the 9-foot navigation channel, maintenance dredging is performed at various locations in the reach of the Illinois Waterway in the Rock Island District. The affected reach of the Illinois Waterway includes approximately 271 river miles (RM) from La Grange Lock and Dam (L/D), RM 80.2, to its source at the confluence of the Des Plaines and the Kankakee Rivers at RM 273, 17 miles of the Des Plaines River to the Chicago Sanitary and Ship Canal (CS&SC) at RM 290, the CS&SC to the South Branch of the Chicago River at RM 321.7, and the South Branch of the Chicago River to RM 325.6. Also included is the Calumet Sag Channel, the Little Calumet River, and the Calumet River, extending from the channel's mouth at RM 303.4 on the CS&SC to just above the T. J. O'Brien L/D, RM 326.4. It is divided into seven pools by navigation dams (or a hydroelectric dam at Lockport). The present navigation system was initiated when Congress passed the River and Harbor Act of 1927, which authorized funds for its development from Utica to St. Louis. This legislation was modified in 1930 to include the State of Illinois initiated project from Utica to Lockport, and further modified in 1935 to increase the lower portion to its present 300-foot width. The CS&SC was completed in 1900 as a 22-foot depth project, and the Cal Sag Channel was completed in 1922 and modified, including widening, in 1960.

The 9-foot navigation channel project in the Rock Island District is composed of 8 L/Ds. Upstream of each dam and extending to the next dam is a slackwater navigation pool. Annual dredging is required at various locations in the main channel.

Annual maintenance dredging of the Illinois Waterway 9-foot Channel Project is generally required at 5 to 15 sites, and the volume of material dredged is approximately 250,000 cubic yards per year. Due to the large sediment load carried by the waterway and continually changing flows, specific dredging locations and quantities to be dredged vary from year-to-year.

The dredged material is usually removed from the navigation channel by a contractor hydraulic cutterhead dredge and discharged to placement sites by floating pipeline. The contract dredge is a 14- to 16-inch hydraulic dredge. Under optimum conditions, the dredge can pump as much as 350 cubic yards per hour as far as 5,500 feet, including 1,500 feet inland.

Dredged material is usually placed along the shoreline or in upland sites located in close proximity to the dredging site. Depending on location, dredged material is placed in the following manner:

- a. Shoreline - material is placed linearly along the shoreline for bankline stabilization or to rejuvenate recreational beaches that have diminished because of erosion.
- b. Upland - material is placed out of the river in bottomland forest, industrial sites, on levees, or in beneficial use sites.

Prior to the discharge of any dredged material, representatives of the Corps of Engineers and the On-Site Inspection Team (OSIT) meet to determine the preferred placement site for the dredged material. The OSIT is composed of representatives of the appropriate Federal and State agencies. The U.S. Department of the Interior, U.S. Fish and Wildlife Service, along with representatives of Illinois, participate in the OSIT. At the end of each dredging season, the OSIT inspects each placement site and makes recommendations to the Corps of Engineers for future maintenance dredging events. In addition, the OSIT prepares a Post Placement Evaluation Report and submits this information to each involved agency for review.

Coordination with Other Federal and State Agencies: Channel maintenance activities typically require coordination with the following agencies:

- U.S. Coast Guard Eighth District - New Orleans, Louisiana
- U.S. Environmental Protection Agency, Region V - Chicago, Illinois
- U.S. Department of the Interior, Fish and Wildlife Service - Rock Island, Illinois
- Illinois Environmental Protection Agency - Springfield, Illinois
- Illinois Department of Natural Resources - Springfield, Illinois
- Illinois Natural History Survey - Havana, Illinois
- Illinois Department of Agriculture, Bureau of Land and Water Resources - Springfield, Illinois

Authority

OM - Operations and Maintenance -- River and Harbor Acts of 1927 and 1930

Additional Information

Additional Congressional Districts: IL-1, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-12

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